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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/657,401	09/08/2003	Laurence B. Saidman	NOR / 1020A	1731
7590	12/15/2005		EXAMINER	
Kevin G. Rooney Wood, Herron & Evans, L.L.P. 2700 Carew Tower 441 Vine Street Cincinnati, OH 45202-2917			NICOLAS, FREDERICK C	
			ART UNIT	PAPER NUMBER
			3754	
DATE MAILED: 12/15/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/657,401	SAIDMAN ET AL.
	Examiner	Art Unit
	Frederick C. Nicolas	3754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 08 September 2003.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1,2,4-6,8-10 and 13-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) 1,2,4-6,8-10,13-20 and 31-42 is/are allowed.
- 6) Claim(s) 21 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/18/04;10/05.
- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Preliminary Amendment

1. The preliminary amendment filed on 1/2/2004, 5/5/2005 and 7/14/2005 have been entered.

Claim Objections

2. Claims 1 and 32 are objected to because of the following informalities: in claim 1, line 4, after "comprising", --the steps of-- should be inserted; in claim 32, line 5, after "comprising", --the steps of-- should be inserted. Appropriate correction is required.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claim 21 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,669,057 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 of Patent No. 6,669,057 B2 encompasses all the limitations of the above noted claim.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Muller et al. (6,164,568) in view of Zook (6,499,631).

Muller et al. disclose a dispensing apparatus for dispensing a liquid as best seen in Figure 1, which comprises a dispenser body (6) capable of receiving and discharging

a flow of the liquid, the dispenser body includes a flow-control mechanism (14) having an open condition in which the flow of the liquid is discharged from the dispenser body and a closed condition in which the flow of the liquid is blocked (column 6, lines 8-16), the dispenser body is spaced apart from the actuator as best seen in Figure 4, a liquid distribution manifold (column 7, lines 1-8), a pneumatic actuator having an air piston housing (4) containing an air cavity (26) (column 5, lines 55-58), an air piston (18) is disposed for movement in the air cavity, a solenoid valve (12) is capable of controlling the flow of pressurized air to and from the air cavity for selectively applying an actuation force to the air piston and removing the actuation force from the air piston (column 6, lines 44-61), the air piston being coupled with the flow-control mechanism for providing the open and closed conditions in response to a flow of pressurized fluid to air cavity from the solenoid valve (col. 5, II. 53-67 onto col. 6, II. 1-61). Muller et al. lack that the liquid distribution manifold capable of heating the liquid, a thermally insulating shield positioned between the air piston housing and the liquid distribution manifold. Zook shows a dispensing apparatus for dispensing a liquid as best seen in Figure 1, which comprises a liquid distribution manifold (14) capable of heating the liquid (column 3, lines 36-54), a dispenser body (16) is capable of receiving a flow of the liquid from the liquid distribution manifold, the dispenser body includes a flow-control mechanism having a first condition in which the flow of the liquid is discharged from the dispenser body and a second condition in which the flow of the liquid is blocked (column 3, lines 43-49), an air piston housing (128), a thermally insulating shield (30) is positioned between the air piston housing and the liquid distribution manifold as best seen in

Figure 2, where the shield is capable of reducing the transfer of heat from the liquid distribution manifold to the air piston housing (4, lines 26-38), .

It would have been obvious to one having ordinary skill in the art at the time the invention was made to substitute the liquid distribution manifold of Muller et al. with Zook's liquid distribution manifold, in order to allow for better control of a product distribution process such as an adhesive, as taught by Zook (column 1, lines 42-44).

It also would have been obvious to one having ordinary skill in the art at the time the invention was made to provide Zook's thermal insulating shield between the air piston housing and the liquid distribution manifold of Muller et al., in order to prevent the heat from the liquid distribution manifold from excessively heating the air piston housing.

Allowable Subject Matter

7. Claims 1-2,4-6,8-10,13-20,31-42 are allowed.
8. Claims 22-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ganzer et al. 5,535,919 disclose other type of liquid dispensing module.
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Frederick C. Nicolas whose telephone number is (571)-

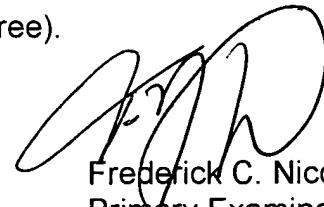
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272-4931. The examiner can normally be reached on Monday - Friday from 9:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Y. Mar, can be reached on 571-272-4906. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

FN
December 5, 2005



12/5/05

Frederick C. Nicolas
Primary Examiner
Art Unit 3754